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Mr. Pogson describes the third satellite as occupying nearly two seconds in fading away. The colour of *Jupiter* was considered dull bluish-white; the belts were always well seen. *Jupiter* was less bright than most part of the moon's surface, but not of so feeble a light as the central part of *Mare Crisium*. The calculated interval of immersion or emersion of the planet at Oxford, was $1^{m}\ 40^{s}.8$.

The following observations were made by Mr. Wm. Luff, at his house, which is situated 26″ south and $1^{s}.3$ east of the Radcliffe Observatory:—

Mean Times at Mr. Luff's house.

Object.	Immersion. h m s	Emersion. h m s
4th Sat.	4 39 12·6	
3d Sat.	4 46 37·8	
Jup. I. L.	……	5 52 5·4
Jup. II. L.	4 54 57·0	5 53 36·0
2d Sat.	4 56 58·6	

The telescope employed had an aperture of 2·6 inches, and power of about 50. The belts were distinctly seen when only one-third of *Jupiter's* diameter had emerged from behind the moon. Mr. Luff also remarked at the same time the comparative dullness of the planet's light in contrast with that of our own satellite.

Occultation of Jupiter, observed at Ventnor.

By Dr. R. J. Mann.

Telescope by Ross, 3½ inches aperture: power 120.

" The condition of the atmosphere was eminently favourable for the observation, the performance of the telescope being excellent, and the definition very sharp throughout, so much so that about an hour after the termination of the occultation the dusky ring of *Saturn* was visible with the same instrument, under a magnifying power of 195, although the planet was still at a low altitude.

" At $4^{h}\ 51^{m}\ 29^{s}$ contact had certainly occurred between *Jupiter's* disk and the moon. The planet then seemed a trifle flat at one part of its margin, as if suddenly compressed there; immediately afterwards a *sharp* black line was perceptible, advancing over the planetary disk, and cutting the belts. The lunar surface was quite invisible, and the effect was just that of a flat black ebony ruler, with an even edge, being pushed gradually forward in front of the planet. The uncovered portion of the planetary disk during the progress of the occultation retained precisely its *usual* appearance, *the belts remaining ordinarily distinct quite up to the moon's edge.* The outline of the moon's limb was affected by a slightly tremulous movement, but no irregularity was otherwise observable in it, until immediately before the completion of the occultation; then for a passing instant two or three isolated light points hung in the field of vision; in another instant, but one remained; in yet

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another instant that was gone. The final disappearance was so distinctly marked, that it could have been fixed easily to the tenth of a second.

"At about $4^h\ 52^m$ the illuminated border of the moon was observed in a state of most exquisitely clear definition. The fourth and third satellites of *Jupiter* were then advanced well away from the moon, but served admirably to indicate the precise point at which the planet was to be looked for. At $5^h\ 52^m\ 22^s$ a minute blotch of very peculiar and unlunar-looking light appeared as if *in front of* the moon's edge, seemingly projected upon the lunar surface. In another second a well-defined segment of the planet's disk was visible, clearly protruding beyond the sharply-cut lunar edge. From this time the difference of the planetary and lunar lights became very remarkable, the hue of the planet being an exceedingly *soft* greenish grey. When the disk of the planet was half exposed the belts presented themselves with far finer definition than they have ever been seen with before in the same telescope, *particularly towards the limb of the planet most remote from the* moon. For more than a minute they were traceable quite up to the edge of the planet's face with a lucidity strikingly unusual. They were also plainly *discernible up to the moon's edge*, but not so obviously as they had been when the dark limb of the moon was lying over the planet previously to the occultation. The surfaces of the moon and the planet were severed by a *half-transparent dusky line*, which had the appearance of being stippled off into the softer hue of the planet's disk. As nothing of this kind presented itself while the moon was passing in front of the planet, it is probable the effect was simply optical, and in some way due to the influence of the superior brilliancy of the lunar light. The effect was, however, very obvious and unmistakable."

Occultation of Jupiter, observed at Haddenham, Bucks, on 2d January, 1857. By the Rev. W. R. Dawes.

"The observations were made with the 8-inch object-glass, by Alvan Clark, mounted equatoreally, and driven by clockwork.

"The state of the air was not very favourable at first; a thin hazy cloud producing diffusion of the moon's light, and rendering the obscure part of the moon quite invisible. A parallel wire micrometer was applied. I intended to observe with power 235; but shortly before the dark edge of the moon reached the fourth satellite, which was near its greatest elongation westward, the thin cloud rendered a lower power preferable, and I exchanged it for 160. Before I could get my eye settled again at the eye-piece, the fourth satellite disappeared.

"The *Third Satellite* disappeared at about $4^h\ 52^m$ G.M.T. The moon's dark edge, which was quite visible upon it, occupied about three seconds in passing over its disk.

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